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Hospital Reports.

Pennsylvania Hospital,
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Surgical Clinic by Dr. T. G. Morton.

[Reported by C. R. Morgan.]

Fracture of the Cervical Vertebræ: with extensive lacerated Wound of Scalp.

— —, æt. 23. An hour ago this man was brought into the hospital. His friends report that while working in a hay-mow, he fell through the hatch to the ground, a distance of some thirty feet, striking with full force the side of his head and neck. He is a large muscular man, in weight probably 190 pounds. The scalp wound is very extensive, all the left side of the skull being denuded from the supra orbital region to the occipital. This is trifling in comparison to his other injuries. He has a fracture of the cervical vertebræ. The diagnosis is easy. On examining the spine I find an irregularity of the spinous processes, and a marked depression about the region of the fifth vertebra. The examination gives him considerable pain. The real evident symptoms of fracture of the spine are due to the injury which the cord has sustained; either laceration or compression, or both. The patient has complete paralysis; he is unable to move hand or foot; all the parts below the seat of injury are devoid of sensation. A marked symptom of fracture of the spine is priapism, which the patient before you has in a marked degree. The prognosis in these cases is very unfavorable. Life is not usually protracted beyond the ninth day, and death often occurs at a much earlier period. The treatment consists merely in supporting life, with attention to the bladder, which requires the insertion of the catheter several times a day.

Hydrocele.

No. 1. *Progress of Case.* Upon the patient before you I operated for the radical cure of hydrocele three days ago. Forty-eight hours after the operation there was so much inflammation developed, and general abdominal tenderness, especially in the course of the spermatic cord, that I removed the seton. On its withdrawal some clear amber colored fluid escaped, with some flakes of lymph. Lead-water and laudanum has been applied to the part. As you see, it is much enlarged, and very sensitive. The length of time required for sufficient inflammation to be developed varies with almost every case, but usually from two to four days is quite enough. The tenderness over the region of the belly is not due to any peritoneal complication, but is merely sympathetic, and due to the neighboring local inflammation. If we allow the seton to remain in too long, suppuration will take place, which necessitates a free opening into the sac; then treating the same as an ordinary abscess, using stimulating washes, and afterward compression, with adhesive strips.

No. 2. *Progress of Case.* In this case we have allowed the seton to remain in now four days, and only sufficient inflammation has been excited to warrant the removal of the threads. The enlargement is probably greater than before the operation, but he has little pain in the part except when handled, and no abdominal tenderness. We simply keep the patient in bed and support the part; in a few days absorption of the effused fluid will commence, when we can hasten the cure by strips of adhesive plaster firmly applied.

Morbid Specimens.

1. *Ovarian Tumor; Ovariotomy; Death 40 hours afterward, from shock of commencing Peritonitis.*

The tumor before you I removed from Bridget M., æt. 26 and ten months, who was admitted into the hospital Aug. 9th, 1865. The patient was unmarried. She first noticed a movable tumor in the left illiac region, about the size of a hen's egg; her menses continued to appear regularly until four months ago; since then she has had no appearance. Her general health has been uniformly good. The tumor remained almost stationary until six months ago, when it began to grow very rapidly, but more particularly within the last two months. On her admission the abdomen measured in circumference at umbilicus 40 inches; ensiform cartilage to umbilicus 8½

inches. Between anterior superior spinous processes 18 inches. From median line to left anterior spinous process 10 inches. From median line to right anterior spinous process 8 inches. From umbilicus to left anterior superior spinous process 10½ inches. From umbilicus to right anterior superior spinous process 9½ inches.

There was considerable effusion in the abdominal cavity, but the tumor could be readily moved from side to side, and by pressing its under surface, it could be elevated a considerable distance, showing the pedicle to be of some length, and showing no attachments to the neighboring organs. The tumor presented indistinct fluctuation, and was irregular, of firm consistence, and nodulated as the disease was rapidly advancing. The immense distension of the abdomen produced such a great amount of distress, and the weight of the tumor being more than the patient could well carry, she desired the operation. Much appeared to be in her favor,—youth, good health, single tumor with a long pedicle, and no adhesions.

Thursday, Aug. 17, 1865. *Operation.* Assisted kindly by Drs. Agnew and Wilson. Drs. Pancoast and Meigs were present. I commenced the operation by making the usual incision of four inches immediately below the umbilicus; a large quantity of abdominal fluid was drained off, when the tumor appeared at the wound. The large ovarian draining trocar was introduced into the tumor, but the contents were so thick and tenacious, resembling soft soap, as to be unable to pass through the canula, an incision was made into the tumor, and the contents squeezed out. The walls of the cyst were very thick, in some places of almost cartilaginous hardness. It was found impossible to get the tumor through the wound, which was enlarged above and below some three inches, when I introduced my hand, and readily turned the mass out. The pedicle was found to be very broad, and running all along to the fundus of the uterus, involving the whole of the broad ligament, and the tumor was cut away, the pedicle being secured by passing two long pins (at the suggestion of Dr. Pancoast) through it, being retained outside of the incision, which was then closed by six superficial and three deep sutures. Only a few ounces of blood were lost, and the contents of the belly little disturbed. A flannel bandage was then applied, and the patient put to bed. The reaction was very good, and for 24 hours the patient slept and had no pain, and seemed perfectly comfortable. She then had a slight chill, abdominal pain, and rapid collapse followed, 40 hours after the operation.

Post Mortem. No hæmorrhage, and no effused blood or contents of the cyst in the cavity of the abdomen, a very slight quantity of serum was present, and some lymph; free diffused peritonitis; right ovary healthy. The tumor is before you, and is a non-malignant proliferous cyst, the solid portion weighing 13 pounds, the fluid portion 12 pounds, exclusive of the peritoneal effusion, which amounted to at least 10 pounds, making the entire mass weigh some 35 pounds.

Fistula Lachrymalis.

One of the most annoying affections of the lachrymal apparatus, is obstruction of the lachrymal duct. The patient before you, a young woman æt. 26, had for some time what is known as epiphora, or watering of the eye, a constant overflow of the tears upon the cheek, from closure of the duct; inflammation of the sac at the point of obstruction supervened, a small tumor formed, and an abscess quickly developed, which discharges externally, and now remains open, producing what is known as fistula lachrymalis. Strumous subjects are very apt to suffer from this affection, but it may result from a cold or an injury. In the treatment, the object is to re-open the communication between the eye and the nose. Where there is simply obstruction from a thickened state of the lining membrane of the passages, with a scrofulous habit, we frequently effect a cure by the administration of iron and cod-liver oil, with some of the preparations of iodine, and dilating the lachrymal canal and the ductus ad nasum by the introduction of graduated probes, or following Homan's plan of splitting the canaliculus from the puncta to its junction with the duct, and then overcoming the stricture by rapid dilatation. Where the duct has become obliterated, we are obliged to make a new passage by carrying a narrow-bladed knife down through the duct into the nose, either by the old method externally, from a point immediately above the tendon of the orbicular, or, by what I consider preferable, that by the internal division from the junction of the canaliculus and duct, and the introduction of a gold tube with an arm upon one extremity. The tube is inserted into the duct, after free division by the knife, the arm supports and retains the tube in its proper place, resting in the split canaliculus. By depressing the lid, the arm can be easily observed, as well as the top of the tube, which can be cleaned out, at any time, by passing a probe through it into the nose. The tears, I believe, generally pass down on the side of the instrument.

A small but useful instrument I devised some years ago, in order to do away with the unplea-

ant appearance of the ordinary style, and because, in some cases, the obstruction exists at a point higher up, and can only be overcome by an instrument which favors and keeps open a direct communication between the lachrymal canal and the nose. I now introduce this tube; the flow of blood from the no e is proof that the knife has entered its cavity. Should any irritation arise, wet cloths, or lead-water and laudanum.

Editorial Department.

Periscope.

The Placenta in Natural Labor.

Before the Med.-Chir. Society of Glasgow, Dr. Jas. Patterson read a paper upon the above subject, the substance of which he embodies in the following propositions:

1. When the uterus continues its contractions after the birth of the child, so as to throw off the placenta in a short period, the chance of hemorrhage is very slight.

2. When unassisted, the womb generally discontinues its efforts, for a time, after the birth of the child, and during this rest the placenta cannot be expelled.

3. Hemorrhage occurs during a complete or partial separation of the placenta, and while that viscus is still within the uterus; and when it does supervene, it is generally in proportion to the non-contraction of the womb, and to the time during which the placenta remains unexpelled.

4. To assist the uterus to maintain its contractions for a short time after the birth of the child, to procure the separation and expulsion of the placenta, is a rational method of diminishing the risk of hemorrhage, while, at the same time, it is the surest way to secure the permanent contraction of the uterus, and thereby conduce to a speedy recovery.

This is accomplished by keeping up such an amount of stimulation of the uterus as shall cause it to close around the placenta, so that the latter shall be ready to be acted upon by every succeeding contraction of the womb. The moderate pressure of the hand applied over the abdomen during the descent of the child, is nearly always sufficient at this stage. When the child is born, the hand must follow the descending womb, and grasp it, so gently as not to cause pain, and yet with a moderate firmness. This pressure ought scarcely to be relaxed during the separation of the child from the mother. In a large majority of cases, it will be found that this simple plan will have assisted the partial extrusion of the placenta through the os uteri, so that when the practitioner's hands are again free after tying the cord, he will find, on introducing two fingers, that part of the afterbirth is lying in the vagina. At this stage, to maintain still the pressure on the womb with the left hand, and straighten, without pulling, the cord with the right, by means of the two fingers in the vagina, will in most cases suffice to procure the expulsion of the placenta in about four to six minutes. This is really an expulsion of the placenta and membranes, in the true sense of the word, and not a withdrawal.

When the placenta is thrown off in a short period, the womb is much less liable to relax than when it has been longer retained. He has been struck by the fact that where a child had been born some time, say twenty or thirty minutes before his arrival, the uterus can often be made to contract with great difficulty; and he has found in such cases, that with all care, he could not stimulate the uterus to throw off its contents in anything like the same time that he could have done had he been present before the birth of the child, and this, be it observed, after the womb had had a considerable interval of rest.

The President of the Society, Dr. Ritchie, and all the members coincided in the views expressed by Dr. Patterson, and condemned the rules usually laid down in what profess to be practical treatises on midwifery—that half and even three-quarters of an hour should elapse between the expulsion of the child and the attempts of the accoucher to begin to remove the placenta and membranes.

Angina Pectoris.

Among the formidable diseases on which much attention has been bestowed, there is none of which less is positively known than that of angina pectoris. English observers have found ossification of the coronary valves, or organic disease of the heart, frequently coinciding with angina pectoris, and German pathologists have referred the affection to spasmodic asthma and to gout. We are pleased with the comprehensive views of M. Beau, as reported in the *Journal of Practical Medicine and Surgery*. He does not consider a symptom in the light of a disease, nor does not conceive the presence of structural alterations indispensable when the functional disturbance of an organ is the leading feature of any series of morbid manifestations. Thus, he cannot concede that angina pectoris is a mere neuralgia, the opinion prevalent in France, because, although sometimes no anatomical lesion is discoverable, still pain is not always present. He views angina pectoris as a temporary interruption of the action of the heart, which may result from many different causes. Thus, if by violent exercise or sudden emotion the action of the heart is arrested in a person laboring under valvular disease, suffocation and inability to walk will follow, the extremities will grow cold and the pulse threadlike, extreme dyspnœa supervenes, and in some instances violent pain in the pericordial region, occasionally radiating to the left shoulder and arm. In this instance, the angina is obviously traceable to its cause, but it would be unreasonable to ascribe it always to the same agencies.

Viewed in this light, angina pectoris may coincide with organic cardiac disease, or originate in gout or neuralgic predisposition; but it will always be characterized by the precordial radiating pain, the oppression, the smallness of the pulse, the lividity of the countenance, the refrigeration of the extremities, and especially the sensation of agonizing anguish, which fully justifies its name.

The sudden invasion of the seizure, whether spontaneously arising, or resulting from fatigue or deep emotion, will further assist the diagnosis, but it must be remembered that the symptoms vary considerably in each case.

The affection is of much more common occurrence than is generally supposed, and M. Beau goes so far as to assert that the greater number of unexplained cases of sudden death are attributable to that variety of angina which induces syncope.

The progress of the disease is not less variable than its outward manifestations. In youth and in the aged its results are widely different. In the latter, the affection is rapidly and almost constantly fatal; whereas, in the former, it is susceptible of cure.

M. Beau has remarked in all the individuals in whom he observed the disease a marked tendency to dyspepsia, and this condition was preceded by, or coincided with, severe sorrow; angina had subsequently been developed under the operation of various causes, such as idiosyncracy, previously existing disease of the heart, the gouty diathesis, etc. M. Beau opines that the use of tobacco has a twofold share in the production of angina: in the first place, in destroying the appetite; in the second, by a peculiar mode of action, whatever be the form in which tobacco may have been used.

M. Beau received further demonstration in the case in his wards, which had served to point his remarks on angina. In this individual, a confirmed smoker, heart disease had followed the first paroxysm of oppression. M. Beau persuaded the patient to discontinue the use of tobacco, and appetite, which had long ceased to exist, was promptly restored, the dyspnœa yielded, and nightmare, to which this man was extremely liable, entirely disappeared. To the cessation of smoking, and possibly to the exhibition of digitalis, (which M. Beau considers as a tonic of the heart, and the paramount remedy for asystolia,) the patient would now be in a perfectly satisfactory condition, had he not imprudently exposed himself to cold, and thus become affected with bronchial inflammation, the consequences of which may, perhaps, imperil the good effects already secured.

Another patient was an habitual snuff-taker. M. Beau caused him to discontinue the practice, and the improvement has been such that a complete cure may legitimately be anticipated.

The professor considers tobacco in all its forms as an irreconcilable enemy, and to counteract its evil influence, he does not confine himself to mere advice which a hardened smoker would assuredly neglect, but predicts, if the bad habit be not discontinued, that fatal results must soon and inevitably follow, an unanswerable argument which the most intractable cannot well avoid noticing, and which, in general, ensures their compliance.

Turpentine Vapor Baths.

Dr. Gibert, a few days ago, read a report to the Academy of Medicine on a paper sent in by Dr. Chevandier, of Die (Drôme) on the use of a turpentine vapor bath in cases of rheumatism, gout, pulmonary catarrh, cramps in the stomach, etc. The patients are exposed for half an hour to the action of the aromatic vapors evolved during the combustion of resinous shavings of the Mugho pine, by means of special fumigatory apparatus. The temperature should never fall below 45 deg. Reamur (134 deg. Fahrenheit.)—*Phar. Jour.*

On the Therapeutical Properties of the Salts of Lithia.

By Dr. Garrod.

The British Pharmacopœia contains two salts of lithia—namely, the carbonate and the citrate, which have been introduced into medical practice by Dr. Garrod. Lithia is an alkali, being the oxide of the metal *lithium*, which is the lightest solid known, and has a very small atomic number—namely, seven on the hydrogen scale; and lithia has, therefore, a much greater saturating power than either soda or potash, the metallic bases of which have the atomic numbers respectively of twenty-three and thirty-nine. Another peculiarity of lithia is, that it forms a salt with lithic or uric acid, much more soluble than the salts of other bases; more soluble, in fact, than lithate of potash, and far more so than lithate of soda or ammonia. Hence it appears that the salts of lithia must be valuable remedies when the object is either to keep uric acid in solution during its transit through the urinary organs, or to prevent its deposition within the structures of the body. The carbonate and citrate of lithia may both be obtained in the crystalline form, the citrate being in large crystals; the carbonate is very sparingly soluble in water, but the citrate is freely soluble. Dr. Garrod thus sums up the therapeutical properties and applications of the salts of lithia:—1. Lithia salts are readily absorbed by the stomach, and pass through the kidneys, the carbonate remaining unchanged in its passage; the citrate and other salts with a vegetable acid undergo decomposition and appear in the urine in the form of the carbonate of the base. 2. Lithia combined with carbonic acid or a vegetable acid, given in the form of a dilute solution, acts as a powerful diuretic, probably more so than the corresponding salts of potash or soda. 3. Lithia salts exert a much more powerful influence upon the condition of the urine, in rendering it neutral or alkaline, than the salts of the other alkaline metals; that is, when given in the same doses. 4. In certain states of the system, in which urate of soda is liable to be deposited in the tissues, leading to the production of gouty inflammation, the administration of lithia salts is attended with advantage; probably, both by aiding elimination, and by assisting the solution of the urate in the animal fluids. 5. Lithia is not foreign to the system; it has been found by means of spectrum analysis in the ash of the blood and flesh, although its amount is extremely minute. When its administration is continued for a lengthened time, no injurious consequences ensue, although we should be guided by the same rules in suspending the use of lithia as in the case of other alkaline remedies. 6. The dose of the carbonate may range from three to six grains, of the citrate from five to ten grains; the carbonate may be

given in aërated water, and free dilution aids its diuretic action.—*Med. Times.*

The History and Pathology of Pellagra.

The Academy of Medicine, says the *Gazette Medicale*, proposed this subject for one of its prizes in 1864, and MM. Claude Bernard, Velpeau, J. Cloquet, Serres, and Rayer, having reported on the several works sent in, the prize of five thousand francs has been awarded to M. Roussel, and an accessit of two thousand to M. Costallat. The opinion supported by these writers is, that pellagra is a specific disease, caused by a fungous parasite developed in diseased maize. It has been abundantly proved that the cause of endemic pellagra is to be sought for in the food. An improved diet cures it—*i. e.*, if not too far advanced. Peasants afflicted with it on entering good domestic service get well; conscripts suffering from it are cured by their soldier life, so that the Italian Government no longer considers pellagra as exempting the patient from military service. The change of regimen thus followed by the cure of pellagra was in all cases the abandonment of the continual and almost exclusive use of maize flour; and according to M. Roussel, history and geography confirm the connection between the use of maize as a food and the existence of pellagra. It exists in certain parts of Italy, France, Spain, and Hungary, and in all those parts maize constitutes the principal food of the peasantry; and till maize was introduced into those countries as a food, pellagra was unknown there.

In reply to the fact that pellagra is not common in Burgundy and La France-Comté, where maize is largely consumed, MM. Roussel and Costallat affirm that the inhabitants enjoy a better general diet in conjunction with maize, and that they dry the maize in furnaces, by which the development of the fungus is prevented. In years when the maize is good and sound, pellagra greatly diminishes; when the maize is bad—that is, much attacked by the fungus—pellagra rages; those attacked by pellagra recover on ceasing the use of maize, but it has not yet been distinctly proved that they will recover if they continue to eat maize, only taking care that it is sound and free from the fungus—the *verdet*, or sporisorum maidis.

The pellagra sporadique of M. Landouzy, and the pellagre des aliénés of MM. Billod and Brunet, are examined and judged to be not true pellagra. In Old Castile and Aragon, a disease very closely resembling pellagra, and called *flema salada*, is common, and maize is not eaten. M. Costallat visited the country, and is disposed to believe that the disease is caused by a fungus that is commonly found in the bread of the country. The reporters appear to agree with M. Costallat, that only one thing is needed now to the absolute demonstration of the theory that the verdet is the essential cause of pellagra—viz., "change only one thing in the diet of the pellagrous—substitute sound maize for damaged maize; if the pellagra persists, the verdet is not its cause; if it gets well, the verdet is its cause."—*Brit. Med. Chir. Review.*

On the Treatment of Croup by the Inhalation of Lime-water.

M. Kuchenmeister, of Dresden, has stated that diphtheritic membranes are rapidly dissolved in lime-water; and this statement has been confirmed by M. Biermer, the Professor of Clinical Medicine in the University of Berne, who has repeated the experiment before the students of his class.

The *Brit. For. Med. Chir. Review* says that some pseudo-membranous exudations, of considerable extent and thickness, were placed in a small glass of lime-water, and in the space of from ten to fifteen minutes, and before the eyes of the students, they disappeared, leaving only a very slight sediment at the bottom of the glass. M. Biermer was therefore induced to apply the lime-water locally in a living patient, and he has published the results, which were quite satisfactory. The patient was a girl, aged seventeen, admitted into the hospital of Berne for croup, which had lasted four days. When she was admitted, she was nearly choked, cyanotic, and insensible, and she threw up portions of membrane only by means of the administration of some very strong irritant medicines. The symptoms of laryngeal constriction still continued, together with distressing dyspnœa; and pulverized water was employed to moisten the respiratory passages. The water employed, which was at first hot, and then boiling, produced considerable amelioration; and M. Biermer, having previously tried the experiment mentioned above with the false membrane and lime-water, supplied the pulverizer with lime-water. The improvement was evident as soon as the inhalations were commenced; the symptoms diminished in intensity; the expectoration changed its character, and became purulent; the cough gradually disappeared, and the fever abated; and only hoarseness and a slight cough remained during the convalescence, which terminated in a complete cure. M. Biermer and all those who watched the progress of the case, were convinced that the inhalations had a solvent effect upon the false membranes; but the professor does not recommend an exclusive adoption of this local treatment, which softens and detaches the exudations, but does not reach the cause of the disease, which must be combated by constitutional remedies, calomel being considered the chief. The plan of M. Biermer has been followed by other practitioners; and M. Kuchenmeister has published a case of diphtheritic pharyngo-laryngitis in a child of three years and a half old, treated in the same manner with complete success. Dr. Brauser, of Ratisbon, has also lately published a case of croup in a child of four years and a half old, treated in the same manner, and perfectly cured. M. Biermer insists particularly on the necessity of using the injections hot.

Partial Luxation of the Radius.

Dr. Ely briefly reported to the Providence Medical Association, several cases of injury of the elbow-joint occurring in children. Those in whom the injury occurred were unable to bend their arm, or raise it to their head. Little or no

pain was experienced, and in the majority of the cases nothing abnormal could be detected, either by the eye or manipulation. It was generally produced by lifting the child by its arms. It was thought to be a partial luxation of the radius back upon the humerus. The luxation was reduced by grasping the hand and forearm, radiating it, and suddenly carrying it to the head.—*Boston Med. Jour.*

Chemical Composition, and Physiological Properties of Scilla Maritima.

In a long and elaborate paper on the Scilla maritima, published in the *Wiener Wochenblatt*, (*Schmidt's Jahrb.*), Dr. Schroff proposes a series of questions in reference to the medicinal characters of that plant. He first discusses the question whether the squill-bulbs of commerce are derived from one or two species, and he comes to the conclusion that although a red and a white bulb of the squill are known, yet that they belong to the same species, and that the color depends upon the nature of the soil and the place of growth. The color appears to be the chief distinction between the two bulbs, but the red bulb has a more strongly bitter taste in its external and middle layers; and the raphides occur in the red somewhat less abundantly, but rather larger in size, than in the white. Among other slight differences between the two, the coats or layers of the bulb are more closely and firmly adherent to one another in the red variety than in the white. Exposure to the sun, superficial poison, a higher station, and greater distance from the sea, appear to produce the white color; while a deeper position in the ground, the proximity of the sea, and the greater covering of earth, develope the red. Transitions from one variety to the other are often to be observed; and Dr. Schroff has had specimens of the white squill, in which the greater part of the most external coats exhibited a more or less light-red color. Among other investigations as to the relative activity of the two varieties of the squill, and of the different parts of the same bulb, Dr. Schroff observes that the most external coats, which are tasteless and without parenchyma, are admitted to possess no active properties, and therefore the middle coats, or those which are relatively external in position, are preferred for use, and that the red bulb (as was known to Pliny) is more active than the white.

In reference to the physiological action of squill, the experiments of Dr. Schroff confirm the opinion hitherto entertained, that this plant stands in a peculiar relation to the respiratory and urinary organs. In the animals employed for the experiments, the kidneys were congested with blood, and the urine was very much increased in quantity, and mixed with blood. The more the acrid principle contained in squill prevailed in quantity in the preparations used, the more violent was the action on the lungs; while the *scillitin*, which had but little taste, occasioned more of the phenomena of narcotism. Squill ought therefore to be placed among the narcotico-acrids, near Hellebore and Colchicum. From aconite it is particularly distinguished, from the circumstance that it acts immediately on the kidneys, and produces an increased determination of blood to those organs; while aconite, like digitalis, acts first of all by its effects on the cardiac movements by a change of the force of the circulation. Colchicum and squill, on the other hand, agree with one another in these respects, that their principal action is directed to the ganglionic system, and by its means to the organs of secretion and excretion; and that they both possess an acrid principle, together with their active bitter principles, *colchicin* and *scillitin*, and in addition to their narcotic property. Squill acts, however—and especially by its acrid principle—much more immediately on the kidneys than colchicum. The narcotic property of both plants is only of subordinate therapeutical value, and is chiefly important when the object is to act upon the ganglionic system, and to increase the process of excretion, as in rheumatism and gout. In this respect colchicum is to be preferred, but squill ought to be resorted to when, in especially suitable conditions, a powerful expectorant and diuretic is required. Compared with cantharides, squill appears a much milder diuretic; and, in order to develope hyperæmia of the kidneys, much larger doses of the latter are required than of cantharides.

On the Application of Physiological Tests for Certain Organic Poisons.

Physiological tests are—remarks Mr. Ticiborne, in the *Dublin Med. Press*—without doubt, of immense value, taken in connection with other facts, but to pronounce upon them *per se* would, in our opinion, be to trust to a broken reed. The chemical action with many organic principals we know are lamentably deficient; but it is to be hoped that much is yet to be done in this respect. Unfortunately those organic substances that possess well-marked toxic effects give the most marked and decided results with reagents—viz., strychnia, morphia, etc., whilst *vice versa*, those which are wanting in definite chemical reactions are less marked in their toxic evidence. The communication of Drs. Fagge and Stevenson is to throw some light upon this subject, especially in connection with digitaline. "It has been expressly denied," say the authors, "that animal extracts, such as those obtained from the contents of the human stomach, or from vomited fluids, could in themselves be poisonous to the lower animals; we found that in almost every instance the toxic action of such extracts was most decided and unmistakable. The recognition of this fact must have an important bearing upon the application of physiological evidence. Unless some points of difference should hereafter be discovered, it will render impossible the detection of many vegetable substances, such as lobelia, emetina, veratrum viride, and delphinium staphisagria, by their physiological effects.

Digitaline is one of a small class of substances of which the action on frogs appears identical, as the heart is the organ primarily affected by them; they may be called cardiac poisons so far as frogs are concerned. The cardic poisons of the authors are, Upas Antiar, Helleborus Viridis, Tanghinia Venenifera, arrow poison, and Scilla Maritima. Besides digitaline only two of them—viz., helle-

borus and the scilla are likely to be the subject of medico-legal investigation in this country, and that but rarely. The characteristic effect of these agents on frogs is the production of irregularity of the heart's action followed by complete stoppage of its pulsation, the ventricle remaining rigidly contracted and perfectly pale after it has ceased to beat; the muscular power of the animal being at this time unimpaired, and persisting as long as in frogs in which the circulation has been stopped by other means, such as ligature of the heart. When digitaline is applied endermically the characteristic effect is invariably produced if a sufficient quantity be used. Quantities less than 1-150th of a grain usually produce no effect. But it must be remembered that very poisonous effects are produced by the application of alcoholic or acetic extracts of matter vomited by patients or taken from the human stomach after death. Like the cardiac poisons the animal extracts impair the action of the heart, but their tendency is to cause paralysis of its muscles and stoppage in the dilating condition.

Foreign Body in the Air Passages—Death.

A boy, aged 10, on Monday, swallowed a bean, (*Virchow's Archiv.*), and was immediately seized with a suffocative paroxysm. This soon passed off, leaving the child apparently well during Tuesday, Wednesday, and Thursday; although coughing now and then, he was playing about and lively. On Thursday night another suffocative paroxysm came on, and the child died. At the autopsy, the Morgagni ventricle of the larynx on the left side exhibited a circumscribed inflammatory spot, from whence stretched lines of inflammation toward the back of the trachea. In the left bronchus, immediately after the bifurcation, lay the bean, entirely obstructing it. The portion of the bronchus where the bean was scarcely exhibited any trace of inflammation, and the entire left lung was healthy. The bean was swollen, and measured two centimetres in length and one in breadth. Dr. Beigel, who relates this case, thus explains its phenomena: After the ingurgitation of the bean, this fell into the larynx, and remained in the Morgagni ventricle, where the marks of inflammation were found. On the Thursday night it fell into the air-tube, and left traces of its progress to and fro along the posterior wall of the trachea. Hence it must again have returned into the larynx, and, closing the cords, gave rise to the fatal suffocation. After death the relaxation of the larynx allowed it to fall into the left bronchus.

Lotion of Chlorate of Potash in Phagedenic Ulcers.

M. Ganjot cites, in the *Gazette Hebdomadaire*, a case of very obstinate phagedenic ulcers in the groin of a young soldier, which had baffled every kind of treatment. At last it was recollected that M. Bergeron had found a solution of chlorate of potash very useful in cancroid ulcerations. Twenty grains to the ounce of distilled water were used, and the destructive process was arrested. The case did well; but the author justly remarks that energetic cauterizations are decidedly the best kind of treatment, whilst the chlorate of potash may become very useful in those cases where it is difficult to reach the phagedenic ulceration, or where it would be perilous to use the nitric acid.

Excision of the Tongue.

The *Canada Med. Jour.* says that on the 10th of May Mr. Syme, for the second time, performed the formidable operation of excision of the tongue. The patient was a female about 56 years of age, who had been affected with malignant disease of the tongue for about two years, the affection implicating almost the whole organ, extending to within a short distance of the hyoid bone. Having made an incision in the median line from the lip downward, Mr. Syme sawed through the lower jaw. The two portions being held apart, he readily and rapidly dissected out the whole tongue. Only two ligatures were required; and but little blood was lost. The operation lasted twenty minutes. The patient upon whom Mr. Syme operated some six months ago, is still well, and there has not been any return of the disease.

The Ophthalmoscope in the Diagnosis of Hydrocephalus.

M. Bouchut has recently read a paper at the Academy of Sciences, in which he gives an account of the application of the ophthalmoscope to the diagnosis of chronic hydrocephalus in young children. In this disease, the circulation and nutrition of the eye undergo notable modifications in consequence of the cerebral compression produced by the presence of fluid. When a patient was examined, the following changes in the eye were observable:—1. An increase in the number of the veins of the retina, which retain their usual color. 2. Sometimes a serous peripapillary infiltration. 3. Atrophy of the papilla and optic nerve. 4. Atrophy of the retina and choroid coat. In rickets, however, which often produces a large increase in the size of the head, similar to the commencement of hydrocephalus, none of the foregoing alterations in the eye are to be found.—*Boston Med. Jour.*

Endoscopy.

On Wednesday, March 15, 1865, at a meeting of the Medical Society of the King and Queen's College of Physicians, held in the new College Hall, Kildare street, Dr. F. P. Cruise, of the Mater Misericordiæ Hospital, exhibited an endoscope which he has been using for some time past, and read a short paper explaining its practical utility in the diagnosis and treatment of many obscure forms of disease, especially those of the rectum and urino-genital organs. Dr. Cruise's endoscope is a modification of Desormeaux's, and possesses the great advantage over it of an illuminating apparatus, so brilliant and easily admitting of such perfect adjustment, that little or no previous training is required to enable the practitioner to obtain a satisfactory view of deep cavities which heretofore have been looked upon as quite inaccessible to sight.

Amongst these we may specially mention the bladder and urethra; the rectum beyond the

reach of the finger and speculum; the cavity of the cervix, and even of the body of the uterus; the nasal fossæ; the pharynx; cavities of ovarian cysts; abscesses, wounds containing foreign bodies, etc.

Dr. Cruise's paper was enriched by the details of a number of obscure cases in which he had used the endoscope to the entire satisfaction of numerous medical men in Dublin.

Dr. Cruise's improvement in this instrument is the devising of a satisfactory and manageable illumination. He proposes shortly to publish a full account of the instrument and of the results he has arrived at from its use.—*Med. News and Library.*

Curative Treatment of Phthisis.

At a recent session of the French Academy of Sciences, says the *Archives Générales de Médicine*, M. Fuster read a communication on the curative treatment of phthisis. He announced that he had been trying, since the 11th of April last, in the clinical wards under his charge at Montpelier, in the treatment of pulmonary consumption and other affections characterized by a general consumptive condition, a method of treatment which had given him so much encouragement that he felt obliged to make it known.

His treatment consisted in the use of raw mutton or beef, together with alcohol largely diluted and in small doses. The meat, reduced to a pulp by pounding it, and passing it through a sieve to remove all the tendinous portions, is given in balls rolled in sugar, or as a sugared pulp in teaspoonful doses, in the quantity of one hundred to three hundred grammes daily. A drink made by mixing a hundred grammes with five times as much cold water sweetened, answers as a beverage for these patients. The alcoholic draught, composed of one hundred grammes of alcohol, of 20 degrees Baumé, diluted with three hundred grammes of some sweetened vehicle, is given in teaspoonful doses from hour to hour; the proportion of alcohol and the interval between the doses should be varied according to the susceptibility of the patient.

"The combination of these two agents is necessary to success in this method of treatment. The first appears to me to have a reconstructive agency, and the second a more direct action upon the blood-producing organs.

"There is nothing new in this method of medication, unless it be the combination of the two remedies mentioned, and their application to consumptive patients."

The author declared that by this mode of treatment many patients affected with pulmonary consumption of a very grave character, and with purulent infection, had been perfectly cured.

Structure of the Placenta and Umbilical Cord.

These parts, according to Professor Simpson, are formed of nucleated cellular tissue, traversed by the tubes of the umbilical arteries and veins, and their subdivisions, and are destitute of capillaries, vasa vasorum, lymphatics, and nerves. Their structure is therefore analogous to the lower zoophytic existences.

Extraordinary Fibrinous Deposits in Aorta.

Dr. J. L. Downing reports, in the *Pacific Med. Jour.*, the history of a Mr. S., aged 59, where all the symptoms of ossification of the semi-lunar valves occurred, but, after death, post-mortem examination revealed cartilaginous deposits in both auricles, and extending through the aortic openings, preventing the perfect closure of the valves. Some of these fibrinous deposits were removed, measuring over a foot in length. There were no attachments, save at the point of origination, the free ends or strips floating in the arteries. The left lung was completely dissolved, and the cavity filled with pus. The left pulmonary artery closed abruptly at the mediastinum, in a sort of pouch, readily admitting the finger to its extremity. In the upper portion of the right lung were found firm pleuritic adhesions, showing preëxisting inflammations that may naturally account for all these conditions.

Reviews and Book Notices.

Researches on the Medical Properties of Nitrous Oxide, Protoxide of Nitrogen, or Laughing Gas. By George J. Ziegler, M D., Physician to the Philadelphia Hospital, Member of the Academy of Natural Sciences of Philadelphia, etc. J. B. Lippincott & Co. 1865.

The above is the title of a brochure by a gentleman of high standing in the medical profession of Philadelphia, who, it will be remembered, contributed several valuable articles upon the properties of nitrous oxide for this journal. Indeed, the volume professes on the title page to be a republication from the Reporter, but revised with such alterations as were deemed necessary by the author. In it Dr. Ziegler presents a condensed summary of the medical properties and applications of nitrous oxide, as determined by him from observations and original experiments, extending over a term of sixteen years. Of course, these are, from the necessity of things, incomplete, and to the same degree they are inconclusive—yet they are sufficiently impressive to attract the attention, and induce a more extended inquiry into its sphere of usefulness.

The volme is a duodecimo of 66 pages, and one of the handsomest in appearance we have seen belonging to scientific literature. The paper is of the finest tint, exquisite printing, with a plain but elegant binding. As we have remarked before, when speaking of this subject, we cannot see why medical works should be the only ones where external appearance is ignored, and we notice with no little satisfaction that within the past few months several volumes have been placed on our table, whose exterior, and interior, as for that matter, will compare favorably with any publication in other departments of literature.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SEPTEMBER 9, 1865.

THE BRITISH MEDICAL ASSOCIATION.

In our last we gave a partial notice of the proceedings of the late meeting of the above Association. At this meeting a new feature was introduced into the proceedings of the Association, viz., discussions on subjects in scientific and state medicine. Four subjects were selected for discussion, each being introduced by an essay. The following were the subjects discussed:

1. "Are there any antecedent conditions influencing the production of Cancer?" Introduced by Mr. C. H. Moore, Surgeon to Middlesex Hospital.

2. "Is there any foundation for the Hypothesis of the origination of Disease by Zymosis, or Ferment?" Introduced by Dr. Richardson.

3. "What measures should be advocated by the Association for securing an improved position to medical scientific witnesses in Courts of Law?" Introduced by Dr. J. A. Symonds.

4. "Why are Sanitary measures not always followed by a decrease of Mortality?" Introduced by Dr. Tindal Robertson.

These subjects were discussed with a good deal of spirit, by various members of the Association. We shall endeavor in due time to give an outline of the papers and the discussions to which they gave rise. There were also about fifteen volunteer papers presented by members, which we may be able to notice again hereafter.

But the two most important papers presented at this meeting of the Association were, "The Address in Medicine," by William Stokes, M. D., of Dublin; and "The Address in Surgery," by James Syme, F. R. S. E., of Edinburgh. These are names whose fame is not confined to the narrow precints of their places of residence, nor yet to Great Britain, for they have attained a world-wide celebrity, and their works on the practice of medicine and of surgery are no doubt familiar to most, if not to all of our readers. These distinguished men gave a resumé of the progress of medicine and surgery, which was exceedingly instructive, and which we shall take occasion to again recur to.

The subject of the address of the President, Dr. Samuel J. Jeaffreson, was inspired by the locality in which the Association met, and in which he is a distinguished practitioner, it being upon "Mineral Waters and Spas in general, and on Leamington in particular." On this subject Dr. Jeaffreson very properly assumes that the profession ought to know more than they do, in order that they may be able to select for their patients the particular watering-place best adapted to the diseases under which they labor. After a brief notice of the principal mineral springs of ancient and modern times, he proceeds to give some account of those of Leamington. It was about the beginning of the present century that the Leamington waters first began to attract general attention. "They belong," says Dr. Jeaffreson, "to the class of mild evacuants, their chief evacuant action being on the alimentary canal; they act also on the kidneys, sometimes proving inconveniently diuretic, without some modification of their use. They are also slightly diaphoretic; and actively so, when their internal administration is combined with their external use in the form of baths. They also, pre-eminently belong to the class of alteratives and deobstruents, and it is chiefly in this respect that they are so valuable—modifying the secretions of the liver, kidneys, skin, and all the excretory glands, as also of the mucous membrane of the alimentary canal, and acting strictly as a blood remedy. The specialty of the action of most mineral waters, probably depends more on those minute traces of certain subordinate components in them, than on those that constitute their chief bulk. I am disposed to think, judging from their effects, that our waters owe much of their virtue to the presence of small proportions of iodine and bromine, as also, in some cases, of iron." Dr. Jeaffreson recommends that they should be given on an empty stomach, in quantities varying in the adult from ten to thirty ounces. He most frequently gives from twelve to eighteen ounces, and advises that the dose be divided into two or three draughts, with an interval of a few minutes between each, which promotes their absorption and assimilation, and prevents the inconvenience so often arising from too rapidly swallowing any large bulk of fluid. He prefers to use the water milk-warm.

What Dr. Jeaffreson says of the waters of Leamington, may be applied to those of many, if not most other mineral springs. The profession of this country should familiarize themselves more with the characteristics and virtues of our mineral waters, for there are many cases in their practice to which they will find them well adapted.

We might profitably quote further from Dr. Jeaffreson's address, but have not space to do so now. We may recur to it again, however, par-

ticularly on the subject of bathing, on which he makes some very judicious remarks.

During the meeting of the Association fifteen new members were elected. At 6, P. M., on Friday, the exercises were wound up with a dinner, with its usual accompaniments of toasts, speeches, etc. In response to the "Bishop and Clergy of the Diocese," the venerable Archdeacon Sandford uses the following remarks, on a subject that is of interest and importance in the sick chamber:

"It had been justly remarked by Dr. Thomson, that the medical and clerical professions were akin. He must confess himself that he considered them to be identical, for, considering the reciprocal action of the mind upon the body, and the body upon the mind, he had often as a pastor to thank God for the labors of the medical profession; and he felt confident that the medical man must admit the curative influence of the Gospel. He had sometimes wondered how it was that the two professions did not work more harmoniously together, and that it was not until the medical practitioner resigned his work, that he said to the weeping relatives: 'Now, you may send for the minister of religion.' But his esteemed and venerated friend, Dr. Jephson, had explained to him the cause of this apparent want of harmony in the professions; and he was afraid that it was because clergymen were not always sufficiently gentle, judicious, and self-restrained in the sick room, that they were not more popular with the medical profession as joint-laborers. He wished every one of his brethren had heard the lecture delivered in his ear that day by Dr. Jephson; and he felt satisfied that if a clergyman administered strong meat when meat was not tolerated, he must bear the displeasure of the medical man; and that it was only when Christian pastors understood how to attend a sick room that they would be popular with medical men, or with their patients. At the same time, he must be permitted to say that the great Physician of the soul was also a physician of the body; and the more they trod in His footsteps the greater benefits would be derived."

We have given a somewhat extended notice of the proceedings of the British Medical Association, in order that our readers may be able to compare them with those of our own Association, and see wherein any improvement may be suggested in our mode of conducting business.

THE RANK AND PAY OF HOSPITAL STEWARDS.

We would call the special attention of our readers to the communication in another column on the subject of the rank and pay of Hospital Stewards. It is surprising that men as intelligent as hospital stewards are required to be, and who occupy positions of so much responsibility, should be assigned such low rank and pay. Our correspondent states the case very forcibly and intelligently. He is stationed at a frontier military post, where circumstances have been such, that from May 7th to the middle of August, 1864, and again from the beginning of June to the present time, he has been performing the duties of post-surgeon, and yet he receives but thirty-three dollars a month, and ranks simply as a sergeant! We trust that this matter will receive the attention of Congress, and that higher pay and rank will be granted.

Notes and Comments.

Registration of attendance at Hospitals.

Not content with receiving the services of medical men gratuitously, the managing committees of hospitals sometimes presume to limit the attendants in the kind and amount of remedies prescribed, the time of attendance, etc. At the late meeting of the British Medical Association the following action was had respecting the registration of attendance at hospitals:

"The President wished to take the sense of the meeting on the following question:

"Whether it be consistent for physicians or surgeons of hospitals to sign, by the order of the managing committees, a return of the time they enter on their duties each day of attendance, the time of leaving, and the amount of professional labor performed?"

It was unanimously decided:

"That such registration is inconsistent with the position and dignity of members of the medical profession."

Cholera in New York.

There is a great deal of solicitude in the city of New York, in view of the probable appearance of epidemic cholera in that city at no distant day. There have been four visitations of cholera in the city of New York, producing a mortality of 3513 in 1832; 971 in 1834; 5071 in 1849, and 2509 in 1854. There have been some sporadic cases of cholera this year, sufficient to warn the authorities to attend to the sanitary condition of the city.

Honors Conferred on Medical Men.

Dr. S. W. Gross, son of Professor Gross, of this city, who served as brigade-surgeon from the commencement of the war until the latter part of last June, has had the brevet of lieutenant-colonel conferred upon him by the President, for "faithful and meritorious services." Dr. Gross, we understand, is about to open an office in this city, and to engage in a course of lectures upon Anatomy and Operative Surgery.

We notice also that the same brevet has been conferred on Dr. John Neill, of this city, for his

services in inaugurating the system of hospitals for which this city was so distinguished during the war.

Practical Anatomy.

We would call attention to the announcement of the College Avenue Anatomical School. Dr. FORBES has been successfully engaged in teaching Anatomy for several years, interrupted only by a term of service as volunteer surgeon in the army. The medical colleges leave it optional with the student where he takes his anatomical ticket, and there are some advantages in taking a private ticket. We would recommend students to visit Dr. FORBES' rooms before taking their tickets elsewhere, and see what advantages he offers them.

A Board of Inquiry.

By direction of the Secretary of War, a Board of Inquiry is called to convene at Fortress Monroe to investigate the facts pertaining to the management of the hospitals at Camp Hamilton and Fortress Monroe, past and present.

The board consists of Major J. S. Baker, Surgeon F. J. Bancroft, and Captain S. P. Corlis. They have authority to send for persons and papers that may aid them in making a thorough investigation. This board is appointed by Major-General MILES.

Correspondence.

DOMESTIC.

Rank and Pay of Hospital Stewards.

EDITOR MED. AND SURGICAL REPORTER:

Knowing the interest that the members of the medical profession take in all who are in any way connected with their noble calling, I presume to solicit the publication in your valued periodical of a few observations relative to the rank and pay of hospital stewards.

Only those who have been connected with the medical department of the army can be aware of the vast responsibilities which devolve upon this little respected and poorly remunerated grade of officers. If any one will take the trouble to peruse the hospital steward's manual, he will have some idea of the duties which are imposed upon that enlisted person; but that excellent manual fails, however, to give a correct estimate of the responsibilities which often fall upon the steward.

I am a hospital steward in the army, and since my enlistment, it has fallen to my lot to be stationed at a post where there is no medical officer, and where, consequently, I have to perform the duties of a surgeon. It is true, it seldom happens that stewards are left in charge of hospitals, but it does happen occasionally from unavoidable circumstances, and, as now that the examination to which applicants for the position of steward are subject, is somewhat severe, requiring them to be good apothecaries, and to be in possession of a tolerable knowledge of the less important surgical operations, besides having a good English education. There are few stewards in the army now, (excepting, perhaps, such as enlisted for clerical duty,) who are unable, upon an emergency to fill the absent surgeon's place. Be this as it may, I appeal to the medical profession to judge whether they consider that $33 per month, one ration, and the rank of a sergeant, is sufficient rank and pay for a man who, to be a good steward, must have been at great pains to qualify himself to fill the position.

I quote the following in reference to the qualifications necessary for a steward, from the Hospital Steward's Manual:

"He should be of honest and upright character, of temperate habits, and good general intelligence. He must have a competent knowledge of the English language, and be able to write legibly and spell correctly. This point must be satisfactorily ascertained before he can be enlisted, as, without this qualification, it will be impossible for him to keep the books and records or to attend to the general business of the hospital. In addition, he must have a sufficient practical knowledge of pharmacy to enable him to take exclusive charge of the dispensary, must be acquainted with such points of minor surgery as the application of bandages and dressings, the extraction of teeth, and the application of cups and leeches, and must have such knowledge of cooking as will enable him to superintend this important branch of hospital service. He should be industrious, temperate, patient, and good tempered, and actuated by an honorable desire to minister, to the extent of his ability, to the necessities and comforts of the sick and wounded soldiers who are placed under his charge."

The examinatian of the candidate for the position of hospital steward is now very rigid, and it requires a man of much greater ability and knowledge to pass through it successfully, than it does to pass an examination for the position of quartermaster or commissary of subsistence.

As I write this letter, I am in charge of the hospital at an important military post, and have

been for several months; but for all that, I cannot associate with the officers, because I am an enlisted man, and, for the sake of discipline, I cannot associate with the soldiers, because I am acting post-surgeon, for the time being, and must maintain a certain dignity which belongs to that office, and, although frequently called to administer advice and medicine to those far above me in station, I am not permitted, by reason of my rank, to hold any conversation with them, beyond that which appertains to their disease, and I can assure the medical profession that it is rather humiliating to have to stand at an "attention," as all enlisted men should do in the presence of an officer, then take three steps to the front, examine the patient, make the diagnosis of his case, right-about-face, march to the surgery for the necessary medicine.

Now, the government herders and teamsters at this post obtain about the same pay that I do, and so also a host of quartermaster's employees who are digging ditches and plastering up the buildings in the fort. The blacksmiths and carpenters get exactly twice as much as I do, the quartermaster's clerks nearly three times as much. At a fort some fifty miles from here, the veterinary surgeon receives $75 per month and ration, for dosing one company of cavalry horses and a few mules. If his balls operate, well and good; and if they do not operate, well and good; the death of one of his patients is a matter of small consequence.

But the steward, who has to deal with the sufferings and ailments of his fellow-creatures, how different it is with him! In the treatment of the sick and wounded, when left to exercise his own skill and judgment for their recovery, he must display knowledge and talent of a far higher order than either the blacksmith, carpenter, or horse-doctor need show.

Even supposing the hospital steward is never without a surgeon over him, is he not entitled to the rank of the highest non-commissioned officer?

I understand that a bill for our relief will be presented to Congress during the coming session, and hope that you will speak for us through your valuable publication, and encourage the Government to give us, if not the rank of a brevet second lieutenant of artillery, at least, that of a cadet, and the pay of a blacksmith.

CADUCEUS.

DR. S. GRAHAM has been appointed by Gov. HAMILTON, to the superintendency of the Texas State Hospital for the Insane at Austin.

Transactions of the American Medical Association.

EDITOR MED. AND SURGICAL REPORTER:

In reply to many inquiries, I would offer the subjoined items for presentation to the medical public, through the columns of your journal. I believe many copies of previous volumes of our Transactions might be sold, which would materially aid our Treasury, and also circulate volumes which are now useless. Subscriptions may be forwarded to the Treasurer, Dr. WISTER, 1303 Arch street, Philadelphia, or to me. The postage must accompany the order, or the volume will not be sent. Vol. XVI. is now in press, but will hardly appear before the new year. I should be most happy, at any time, to furnish any information relative to our Association to your subscribers, either through your columns or otherwise.

"Should you desire a copy, please remit THREE DOLLARS to my address.

"As there are various methods by which the volume may be sent, inform me which you prefer. If by mail, please forward THIRTY-TWO CENTS in post-office stamps, that your postage may be prepaid.

"The following volumes are for sale:

Proceedings of the meeting of organization, 50 cents.

(Vols. I., II., III., IV., and VI. are out of print.)

Vols. V., VII., VIII., and IX., *if taken collectively*, $5 for the set. If singly, $2 apiece.

Vol. X. at $2. Vol. XI. at $2. Vol. XII. at $2. Vol. XIII. at $2. Vol. XIV. at $2. Vol. XV. at $3. Vol. XVI. in press."

WM. B. ATKINSON,
Permanent Secretary.
215 Spruce street Philad'a.

Sept. 2d, 1865.

News and Miscellany.

The Drainage and Sewage of London.

Mr. C. L. BRACE, in a series of very interesting letters to the *New York Times* on European Social Reforms, speaks thus of the Drainage and Sewage of London:

"Throughout England, the question of questions for sanitarians is, 'how to get rid of the sewage of towns and yet keep the rivers pure?' In London the difficulty has been peculiarly serious. It is estimated that there are discharged annually into the sewers of this vast city, (not including the rain-fall or the subsoil water), 180,000,000 *tons of sewage!* This mighty river of nastiness, passing through the low grounds on the banks of the Thames, formerly discharged its

contents into that stream at about its level and about the time of low water. As the tide rose, it closed the outlets and pressed back this fetid torrent into the outlaying portions of the sewers, where it remained a stagnant pool for eighteen hours out of the twenty-four. The heavier ingredients were naturally deposited by this process, and accumulated in the sewers, to waft their deadly odors through the streets of the metropolis. Moreover, when long rains set in with high tides, (as often happened,) these fetid and poisonous parts were pressed still further back by the rising water, and rose through the house-drains and flooded the basements of the houses. Still more, as the tide rose, it carried the fresh deposit of filth up the river to new scenes and rural haunts, and then brought it back with the ebb-tide to make a further mixture with the new daily supply—this arrangement ingeniously effecting that the most filth should be dischaged into the river, when its pure water was in the least quantity, and quite incapable of disinfecting such masses of decaying matter. The result naturally was that the Thames became one vast ditch of dirty and fecal material, poisoning the houses on its banks with vile odors, and seriously affecting the health of the inhabitants. Even the Parliament House became almost uninhabitable.

When cholera broke out in that city, it was discovered that its ravages almost precisely corresponded to the places where this drainage was most defective, and where the polluted water of the river was used.

The objects sought in the improved drainage were the following, which we give in the words of Mr. BAZALGETTE: 'The interception, as far as practicable, of the scourge by gravitation, together with so much of the rain-fall as could be reasonably dealt with so as to divert it from the river near London; the substitution of a constant instead of an intermittent flow in the sewers; the abolition of stagnant and tide-locked sewers with their constant accumulations of deposit, and the provision of deep and improved outfalls for the extension of the sewerage into districts previously, for want of such outfalls, imperfectly drained.'

To carry out these objects new lines of sewers were laid at right angles to the existing sewers, and below their level, so as to intercept their contents and convey them to an outfall fourteen miles below London Bridge. By this means a considerable portion of the sewage is carried off by gravitation, and the rest is removed by pumping. At the outlets the torrent of filthy water is emptied into reservoirs, placed at such a level as will enable them to discharge into the river about the time of high water.

In this improved arrangement, the works for which were commenced in 1859, the discharge of organic material is at once diluted by the large volume of water in the Thames at high tide, and is also carried by the ebb tide twenty-six miles below London Bridge before it begins to return, when it is too much comminuted to be of any injury or annoyance. The reform has been a most important one, and has had a most decided influence on the death-rate of the metropolis. Still it is not at all regarded by Sanitarians as a complete arrangement. Here is emptied into the sea 180,000,000 tons annually of important fertilizing material, and it is estimated that if the manurial constituents were extracted from this and dried, they would be worth 8s. 4d. per head of the population annually, or in round numbers, over $6,000,000, which large value is now entirely lost. A company, I understand, is being formed to do what has been done in several places of England, with such success, to utilize the sewage of London on barren land.

In regard to the details of the London drainage, it may be stated that the mean velocity of the flow to prevent deposit, had been found to be about one and a half miles per hour, when the sewer is running half full.

The quantity of sewage is ascertained to be about in proportion to the water supply, which is some thirty gallons per head per diem. The form of sewers adopted is, for the intercepting sewers, circular; and for the minor branches, egg shape, with the narrow part downward.

The total cost of the sewers of London, when all completed, will be about $20,500,000. This sum is to be raised by loan, which is to be paid by a rate on the metropolis, producing about $900,000 annually; the principal and interest to be paid off in forty years.

There are about 1,300 miles of sewers in London, and 82 miles of main intercepting sewers. For material 318,000,000 bricks have been used, and 880,000 cubic yards of concrete; and 3,500,000 cubic yards of earth have been excavated. The pumping power employed is equal to that of 2,380 horses.

The total discharge, it is expected, will be 63,000,000 cubic feet per diem, "which is equal to a lake of 482 acres three feet deep."

Ventilation.

A short time ago General MORIN read a paper to the Paris Academy of Science on the ventilation of public buildings. The fundamental principle of good ventilation, he observed, was as follows:

"To draw off the vitiated air from the stratum nearest the floor; that is, in the immediate vicinity of the persons in the room, and to admit pure air through the ceiling or apertures made in the walls close to it. In winter the air to be introduced may be previously warmed by an apparatus placed under the roof; but in summer considerable difficulty is encountered in lowering the temperature of the air to be admitted, since the sun having darted its rays upon the roof during the day, the space under the roof is so hot that instead of admitting cool air, it penetrates into the building at a much higher temperature than that of the interior. General MORIN has tried four different plans for cooling the air. The first consisted in making it pass through a space filled with pulverized water—that is, reduced to a sort of dust, as it were, by making two jets of water strike against each other with great violence. By this method the temperature is only lowered by two degrees, and moreover it would require a considerable quantity of water and costly machinery to effect it, unless ample water-power

were at command. The second plan consists in making the air pass along the sides of metallic vessels containing water, which may, if necessary, be cooled with ice: but here again there is the difficulty of giving the cooling surfaces a sufficient development—a condition which cannot easily be complied with, and which, therefore, in point of fact, renders this method impracticable. The third consists in making openings on that side of the building which is never exposed to the action of the sun, while the vitiated air is drawn off through metallic tubes, the draught of which is increased by the action of the solar rays to which they are exposed. On the side exposed to the sun, the windows should be closed with blinds, or in the case of skylights, the glass panes may be watered outside. The fourth process will be easily applicable as soon as Paris can command abundance of water by the new aqueduct of the Dhuys. It imitates the natural effect of rain, and is very efficacious, since one cubic metre and a third per hour will suffice to water 100 square metres of roofing, which will thus be prevented from being over-heated by the sun. Applied from an early hour in the morning, and continued as long as the sun shines on the building, it not only prevents the roof from getting hot, but will reduce the interior temperature of the building very considerably, and cool the air admitted into the garret or space under the roof. As this operation of watering need not be performed for more than sixty days every year, the cost for a large railway station, like the Orleans one, for instance, would not exceed 1000f. each season."

Antiquity of Man.

Galignani says that at the last meeting of the Paris Academy, M. Robert read a paper on flint implements, beginning with some remarks about the quarries of St. Priest, near Chartres, where a large number of bones of the elephant, rhinoceros, and other pachydermata had been found.

He states that, after a minute examination, he has been unable to find on these bones the slightest mark, except such as had been produced by the stroke of the pickaxe or shovel in bringing them out. Some, indeed, might have been caused by the violent rolling of pyromachous flints over them. The bones, moreover, had not been found in a sandy, but in a pebbly soil; and our author expresses surprise at finding the ground, and certain caverns at Leves, nearly covered or filled with the above-mentioned flints, all agglutinated together with a kind of reddish clay, containing much hydrate of manganese. M. Robert contends that all the supposed marks of instruments observed on fossil bones, must have been produced by the rolling of broken flints driven forward by the elements. He seems to forget, however, that some of those marks were actually representations of animals and other visible and well-known objects. But, on the other hand, returning to the subject of Pressigny le Grand, he declares, as before, that the fragments of flint found there are not by any means instruments made by the savage ancestors of the Celts, but are the refuse left there after fruitless attempts had been made to get good gun-flints out of the particular quality of flint so abundant there. As this quality did not answer the expectations of the workmen, they desisted, and went to the neighboring departments to find a sort of stone more applicable to their purpose.

Prostitution Licensed in Nashville.

Americans have been slow to follow the example of European cities in licensing prostitution. In but a single instance has it been done, so far as our information extends. Two years ago, when Gen. Rosecrans commanded the Army of the Cumberland, syphilitic disease prevailed to such an extent as to disable hundreds of his soldiers. In the month of July, the General ordered all the abandoned women out of the state, and a whole cargo of unfortunates were shipped North. The boat touched at Louisville, but was ordered away by the authorities. It then attempted to land its freight at Cincinnati, but failed. It anchored in the river a few days, and soon after departed for Nashville, where it subsequently arrived and unloaded, costing the Government several thousand dollars. But Rosecrans was not to be frustrated. His men were not only being made unfit for service, but a great number of them had been absolutely ruined by their unlawful companionship with lewd women. As the terrible evil could not be annihilated, it was at once resolved to legalize and systematize the avocation of prostitution. Hospitals for the reception of diseased women were speedily built, examining physicians appointed, etc. etc. The result claimed for the experiment was, that in Gen. Sherman's army of 100,000 men or more, but one or two cases were known to exist, while in Rosecrans' army of 50,000 men, there had been nearly 1500 cases. The women were examined once every ten days, paying two dollars for an examining fee, and five dollars a month to ply their avocation. The money was appropriated to hospital uses, and provision thus made for the sick of this class. The institution was nearly self-supporting, the entire expenditure of the hospital for ten months being $6,154, to meet which the fees collected from abandoned women amounted to 5,900. Such are the statements made by a correspondent of the New York *Times*, writing from Nashville.

Preservation of Flowers with their Natural Colors.

Dried flowers, in their natural colors, have for some time past appeared for sale in the shops. The mode in which the operation is effected is this: A vessel, with a moveable cover, is provided, and having removed the cover from it, a piece of metallic gauze of moderate fineness is fixed over it, and the cover replaced. A quantity of sand is then taken sufficient to fill the vessel, and passed through a sieve into an iron pot, where it is heated, with the addition of a small quantity of stearine, carefully stirred, so as to thoroughly mix the ingredients. The quantity of stearine to be added is at the rate of half a pound to one hundred pounds of sand. Care must be taken not to add too much, as it would sink to the bottom and injure the flowers. The flowers thus become dried, and they retain their

natural colors. The vessel still remaining bottom upward, the lid is taken off, and the sand runs away through the gauze, leaving the flowers uninjured.—*Journal of the Society of Arts.*

On the Ebullition of Water.

M. DAFOUR, of Lausanne, says that when we study the ebullition of water, either at different temperatures or different pressures, we know that the dissolved air plays a very important part in the production of the phenomena. The author said that it was interesting to examine the action of other soluble gases. M. DAFOUR made experiments upon hydrogen, carbonic anhydride, and illuminating gases. The conclusions are that the difficulty with which the gases quit the liquids which hold them in solution is owing to an adhesion purely physical, and not from any chemical affinity. It is immaterial which gas is combined with the liquid.—*Cosmos.*

Homœopathic Medicines.

Dr. TAYLOR, the celebrated chemist, in his testimony before the Select Committee of Parliament on Chemists' and Druggist's bills, in reply to questions in relation to the practice of the homœopaths, said:—They say that aconite is in the globules, but I have never found any trace of it; I have been told our chemistry is not refined enough to trace it; we go to the hundred-thousandth, they put in the millionth. The globules consist of sugar and starch. I believe the homœopaths use tincture of aconite. In one instance I detected a strong dose of morphia in medicine prescribed by a homœopathic practitioner. Six powders were made up—three contained sugar of milk, and three contained morphia and calomel. In examining the homœopathic powders, I found in some of them upward of a grain of morphia. They do not always, as they profess, use homœopathic doses. The powders were numbered to be taken on certain nights, and in every other powder there was sugar of milk, and in every other powder morphia and calomel.

The Circulation and its Discovery.

"HARVEY pretends," said PARISANUS of Venice, "that when the hand is laid on the region of the heart, and the ear applied there, we can feel a shock and hear sounds. This may be so in London; but not so in Italy. No doubt we may be deaf; but, at all events, we can hear nothing of the sort." PRIMEROSE, of Montpelier, said: "Our forefathers cured their patients very well, and yet they knew not the things which Monsieur HARVEY teaches. Of what use, therefore, are they?" RIOLAN wrote to HARVEY: "I admire thy discovery of the circulation of the blood, thy skill and ingenuity; but I must tell thee that thou hast endeavored to prove many absurd things, and still more false things."

A New Circulation.

Dr. BENCE JONES, in a lecture recently delivered (says the *Boston Med. Jour.*) at the Royal Institution, says there are good grounds for believing that there exists within us, in addition to the mechanical or animal circulation of the blood, another, and a greater and more strictly chemical circulation, closely resembling, if not identical with, that which obtains in the lower divisions of animals, and in vegetables. A circulation in which substances continually pass from the outside of the body into the blood, and through the blood into the textures, and from the textures either into the ducts, by which they again pass into the blood, or are thrown out of the body; or into the absorbents, by which they are again taken back into the blood, again to pass from it into the textures.

Death from Purulent Infection.

The French journals, says the *Brit. Med. Journal*, announce the death of M. BAUCHET, surgeon, of St. Antoine, from a poisoned wound of a finger resulting from dressing a purulent sore of a patient. A writer in *L'Union Médicale* says:

"If he had performed his hospital dressing with chloride of sodium, permanganate of potass, or alcohol, we should probably not have had to deplore the death of this young and deserving *confrère*. In 1831, I punctured my finger while dissecting. Notwithstanding caustic and fomentations, I had, two days afterward, shiverings, headache, nausea—all the signs of purulent infection. I went to BRESCHET for advice; and he said, 'Go at once to the Café Procope, order half a bowl of punch, drink it burning hot, and run home to bed.' I followed the prescription to the letter, and was in fact, helped home by two friends. It was the only time in my life I ever got tipsy. I slept fifteen hours, and during the whole time sweated profusely. On the following day, all the symptoms of septicæmia, as M. PIORRY would say, had disappeared."

Action of Petroleum on the Human System.

LANDERER relates the case of a man who swallowed a quantity of petroleum; the greater part he vomited again. It caused a strong burning sensation in the tongue and throat, which were reddened and became swollen. The stomach and bowels were also affected, and slight gastro-enteritis ensued. For several days the urine and sweat smelt strongly of the oil, and the odor was specially strong under the arm-pits. The patient was very weak for a time, but recovered. —*Chem. Central Blatt.*

To Perserve Flowers.

It is with great regret we see the flowers of a fine nosegay fade away in the course of a day or two, notwithstanding the care we take to change the water in which we have put them. The *Memorial des Deux Sèvres* informs us that if a good spoonful of charcoal powder be added to the water, the flowers will last as long as they would on the plant, without any need of changing the water or taking any trouble at all.—*Dublin Med. Press.*

Cleansing Sponges.

In performing any operation in which rapidity is necessary—*e. g.*, tracheotomy—ROSER, of Tübingen, observes that a sponge is more rapidly cleaned by pressing it on a towel than by washing.

Bequests.

The late Mr. Thornton, who died worth nearly four millions, has bequeathed £2000 to each of the following medical charities: viz., Guy's Hospital, St. Thomas's Hospital, the London Hospital, the *Dreadnought* Hospital Ship, Bethlehem Hospital, St. Luke's, the Hospital for Idiots, the Orthopædic Hospital, St. Mark's Hospital, the Hospital for Incurables, the Hospital for Consumption, Victoria Park, and the London Truss Society—making a total of £24,000 to medical charities alone. The deceased has been equally liberal with other non-medical institutions.—*Dublin Med. Press.*

Effect of Iron on Plants.

It is stated by several agricultural journals that by watering plants with sulphate of iron the most extraordinary results may be obtained; beans, for instance, will grow to double their size, and acquire a much better taste; the same is the case with pears and other fruit. Water kept in a tub with a quantity of old nails in it may also be used for watering with good effect.

MARRIED.

Cruice—Jones.—August 7, at the Church of St. Andrew, Westland Row, Dublin, by the Rev. Canon Lynch, William H. Cruice, Esq., Surgeon, R N., son of D. J. Cruice, Esq., R. M., Killarney, and Margaret Josephine, daughter of the late Samuel Jones, Esq, J. P., Ardbear House, county Galway.

Cushman—Donnally.—By Rev. M. Luther Todd, at Point Pleasant, West Va., Aug. 2d, Wm. H. Cushman, M. D., of Charleston, Kanawha County, and Miss Cornelia J. Donnally, of Point Pleasant, Mason County.

Hunert—Cheney.—By Rev. Maxwell P. Gaddis, Sr., pastor of M. E. Church, at Yellow Springs, Ohio, at the residence of the bride's father, Aug. 17th, Mr. George Hunert, of Cincinnati, and Mary E., daughter of Dr. A. Cheney, of Yellow Springs.

Hutchinson – Fisher.—On Thursday, Aug. 31st, by the Rev. Edward C. Bittinger, Chaplain, U. S. N., Dr. William F. Hutchinson, U. S. N., and Miss Emma C. Fisher, of this city.

Mellinger—Fowler.—Aug. 30, 1865, by Rev. John Thompson, at the residence of the bride's parents, James H. Mellinger, M. D., and Miss Emma Grace Fowler, both of Philadelphia.

DIED.

Dale.—On Monday, 28th ult., Mrs. Margaret Dale, widow of the late Dr. Richard C. Dale, of Delaware, aged 81 years and 10 months.

Francis.—In New York, on Tuesday, Aug. 29, McAllister, youngest son of Dr. Samuel W. and Harriet H. Francis, aged 8 months and 17 days.

Warner.—Suddenly, at Sing Sing, on the Hudson, on Monday evening, Aug. 28, Elizabeth Gray, wife of Lewis T. Warner, M. D., and daughter of John F. Gray, M. D.

Waters.—At Fort Leavenworth, Kansas, on the morning of August 19, Abby Jane, wife of Dr. W. E. Waters, U. S. A.

ANSWERS TO CORRESPONDENTS.

Dr. R. B. R., Amityville, Pa.—The botanical specimen forwarded by you is the *Polygonum Pennsylvanicum*—knot-weed. It is a common weed in almost all parts of this country.

Dr. L. S., Washington, D. C.—The American Journal of Ophthalmology was discontinued early last year.

Dr. A. W. B., Lexington, Ohio, and others.—Human skeletons are very expensive just now, on account of high duties, and the great cost of ether used in bleaching them. They can be procured at about the following prices:—

The bones unwired and unbleached,	$12 to $15
" " " bleached,	20 to 25
The skeleton wired and unbleached,	30 to 35
" " " bleached,	55 to 65

Dr. L. G. H., Dunkirk, N. Y.—Jorg's apparatus for Torticollis will cost $25. The following measurements will be wanted if the patient cannot be seen by the maker of the apparatus:—Around the waist; around the chest, under the axillæ; from hip to axilla; and to state toward which side the head leans.

Dr. A. M. H., Mt. Joy, Pa.—Vols. 4 to 12 inclusive of Medical and Surgical Reporter bound, sent by Express August 28.

Dr. W. W. H., Havre de Grace, Md.—Vols. 2 to 12 inclusive, of Medical and Surgical Reporter, and two Vols. American Medical Monthly, sent by Express, August 28.

METEOROLOGY.

August	28,	29,	30,	31,	S. 1,	2,	3.
Wind	W.	W.	S. W.	S. W.	S. W.	S.	S. W.
Weather	Clear.	Clear.	Clear.	Clear.	Clear.	Cl'dy, Rain.	Clear.
Depth Rain						4-10	
Thermometer.							
Minimum	56°	62°	68°	63°	67°	65°	69°
At 8 A. M.	65	70	72	68	72	73	75
At 12 M.	72	76	79	79	84	78	80
At 3 P. M.	73	76	79	78	85	80	84
Mean	66 50	71.	73 25	72.	76.50	74.	76.75
Barometer.							
At 12 M.	30.2	30.2	30 3	30 4	30 2	30.	29.9

Germantown, Pa. B. J. Lisdom.

AMERICAN MEDICAL ASSOCIATION.

Members desiring copies of the Transactions for 1865, must forward their subscriptions ($3) immediately, as the number of copies published will be but slightly in excess of the number of subscriptions.

Wm. B. Atkinson,
Permanent Secretary,
215 Spruce street, Philadelphia.

Aug. 12, 1865.

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" VII. Nos. 1, 2, 6, Oct. 5, 12, Nov. 9, '61; Nos. 10 to 12, Dec. 7, '61, to March 8, '63.
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☞ *We are in pressing need just now of a few copies for new subscribers,* of No. 414, Feb. 4, 1865.